5. To obtain accurate statistical information relative to the congregational churches throughout the kingdom and the world.

6. To inquire into the present method of collecting funds for the erection of places of worship, and to consider the practicability of introducing any improved plan.

7. To assist in maintaining and enlarging the civil rights of Protestant Dissenters."

The Home Missionary Society, the Irish Evangelical Society, and the Colonial Missions, are under the direction of the Congregational Union: it publishes a hymn-book, the *Christian Witness*, and the *Christians' Penny Magazine*; the profits arising from the sale of these being applied to various charitable purposes.

MODERN CYCLOPEAN WALL.

A RECENT number of the *Allgemeine Zeitung* contains an interesting account of a visit which the writer had made to inspect the progress of building a wall in the manner called Cyclopean, at Dusternbrook, near Kiel, in Schleswig-Holstein. He considers the effect of the work and the style of execution far superior to any of the numerous remains called by the same name which he had seen in Italy, and goes so far as to give it the preference over any other kind of wall, so far as the plain, vertical surface of the material, apart from ornamental accessories, is concerned. He thinks that the polygonal stones, exerting their pressure in all directions, must ensure stronger work than squared stones, however closely jointed, which only act in the direction of gravity.* Indeed, the innumerable many-sided and multangular stones of all sizes seem run together into one compact mass, of which neither time nor age will get the better. Neither mortar nor any other means of binding the stones together is employed; but the greatest care is taken in fitting the granite blocks one into the other, the vacant spaces in the wall as it is carried up being accurately taken off with a lead tape (*bleistange*) forced with a hammer into all the angles of the openings, and then applied to the flat hewn face of the block best suited, and next to be brought to its proper shape by the workman.

From the workmen he learned that the directions given them by the architect were, "Five-sided and six-sided blocks, seldom four-sided; straight lines; obtuse angles; joint upon angle and angle upon joint; all according to the lead tape, and only inclined junctions." In fact, all the junctions between the blocks were found to be in every gradation between the perpendicular and the horizontal, without coinciding with either of them. In this obliquity of the joints the author detected the arch principle of construction as applied to the work, and the workmen pointed out to him, that each stone either pressed or supported, with every one of its sides, however numerous. He was unable to learn the name of the architect. Herr Mahnke was the name of the builder, who had said that the cost of the work was cheaper than a squared stone-wall; that it was much stronger, so that he should have used it in several larger buildings if he had been acquainted with it sooner; moreover, that this kind of building was to be preferred, because every stone, large or small, can be used up in it. Generally, the writer holds this polygonal or Cyclopean kind of building to be especially applicable in, first, hydraulic works, as it offers nowhere a continuous joint to the water; second, in fortifications;† third, for railways in substruction and steep coverings, and in the cellar story and even in the next story of large buildings and palaces. In these mortar would be used, not as a means of connecting the stone, but only as pointing to the joints, so that the immediate contact of the stone should not be interrupted.

In conclusion, the writer recommends the adoption of this method of building according to determined and clearly defined principles and rules, as altogether practical, wherever the material for polygonal blocks is found,—a method which is at least to us a new one, and not simply a more careful execution of the long used rock walls, or an ornamental imitation of an old style, as in the Walhalla, of which practical method, in short, this Cyclopean wall, near Kiel, is the first example that has been executed in Germany.

Our attention was obligingly drawn by the Earl of Ellesmere to the article quoted above, and his Lordship will, we hope, pardon us for transferring to our pages the following portion of his letter on the subject:—

"I do not remember any instance of a similar modern imitation of a style and mode of construction which never fails in any of its various antique examples to make a deep impression on travellers in Greece and Italy. On a small scale, a dyke fence, by a good Galloway builder, comes nearer to it perhaps than anything. The present engineer of the Liverpool Dock Trust builds his sea-walls of small unhewn stones of various sizes, with large and heavy shapeless blocks at irregular intervals, but these are Cyclopean only in respect of irregularity, for they are wedged in cement. The effect is good, and I believe the repair of the face of the wall, when worn with the water, is easier than with regular masonry.

A true Cyclopean wall is, I apprehend, a recent revival; and, by the account I forward, the experiment appears to me to be one of much interest. EGERTON ELLESMERE."

SUGGESTED IMPROVEMENTS IN LONDON.

I CANNOT but think that among the improvements that are being made in our streets, two points involving the greatest delay have been strangely overlooked. I allude to the point where Gracechurch-street passes across the ends of Fenchurch-street and Leadenhall-street. I do not know whether any estimate has been formed of the actual daily delay at these points: I have tried to form a rough guess: taking certain statistical accounts of the traffic in Cheapside as a basis, I think it will be granted that the daily traffic on foot and in vehicles east and west along Fenchurch street and Leadenhall-street, and north and south along Gracechurch-street, cannot be much under 1,000,000, say as a moderate calculation, 800,000; nor I think is it at all an exaggeration, looking at the very long detention of most vehicles having to pass these crossings in any direction, to suppose that on the average every one loses a minute at each time of passing. This will give an *aggregate daily loss of a year and a half!* I confess I think this is within the mark. How is it to be remedied? We must either divert the traffic or enlarge the channel. It cannot, I think, be doubted that Gracechurch-street is far too narrow for its traffic, and that some day a widening must take place from London-bridge to the wider part of Bishopsgate-street, but I question if this will come first. And I think if any one will look at a map of London he will soon be convinced that the most efficient and cheapest way will be the construction of a new street from the wide part of Fenchurch-street, east of Rood-lane, to Gracechurch-street, about Talbot-court. This will be to the parts east of London-bridge what the new King William-street is to the west, putting Whitechapel and the whole eastern districts in direct connection with Thames-street, London-bridge, and the Borough and the new Cannon-street, and thus with Blackfriars and "St. Paul's" bridges. The immediate relief that this street (with some occasional widenings in the eastern parts of Fenchurch-street) will effect in the west end of Fenchurch-street will be obvious: it will draw off three-fourths of its heavy traffic: it will also materially release Leadenhall-street, by drawing off all the traffic which at present passes along it to Blackfriars.

No one, I think, can look at a map of London without being fully persuaded that some day this change must come.

Then as to the double crossing at the end of Fenchurch-street. Nothing is a more established rule than that all such crossings should be *eased* by the widening of streets and rounding of corners. But here, while only one corner is at all rounded off, *three of the four streets actually are narrowed at the point of junction*. It is marvellous that we should submit to a state of things like this.

Nothing can be more evident than that the west side of Gracechurch-street should be straightened from the London Tavern to St. Peter's-court, and that the corner between Leadenhall-street and Bishopsgate, round which there is so continual a traffic, should be rounded and put back.

It has been more than once suggested to have, at some of these crowded crossings, bridges for the relief of pedestrians. It would seem to me that no point in London could be so eligible as this for a trial of this suggestion, and with these alterations it would be easy to make a bridge from the north side of Leadenhall-street to Cornhill, and another from the west side of Bishopsgate to Gracechurch-street.

But I would suggest, instead, and I think modern engineering would easily accomplish it, a square platform covering the whole crossing, and allowing a free circulation in all directions; and it appears to me, that it might be possible to connect with this a set of first-rate shops at the corners for the lighter trades, which would become a considerable source of revenue.

This plan would necessitate the loss of a portion of St. Peter's Church; but I trust the congregation would well be able, without risk of overcrowding, to spare a portion for the public benefit.

The question will no doubt be asked, How are such plans to be paid for? To which I answer, that the new street from Rood-lane offers as good a chance of repayment as any that could be suggested; that, as regards the other alteration, the corporation are bound to look at it not as a pecuniary matter, but as a public good; and that if the daily loss of time at these points bears any proportion to what I have stated, it is quite time something was done, particularly as the opening of the Crystal Palace will no doubt very greatly increase the traffic along Gracechurch-street and between London Bridge and the Blackwall Railway. A PEDESTRIAN.

With reference to Mr. Bennock's scheme recently proposed in the Common Council for a new bridge over the Thames, in which he proposes the northern end to be in a line with Old Change, Mr. Sharp, in a letter addressed to the Lord Mayor, suggests the opening that is offered for a fine view ultimately of the cathedral of St Paul's. "As near as I can judge from Cary's map of London," he remarks, "a line taken through St Paul's from the centre of south to centre of north doorways, bringing the ball and cross in line of centre of proposed bridge, will give a line to commence at Great Guildford-street, where Maid-lane crosses it on the Surrey side, about Trig-lane, on City side of the Thames, and might branch off east and west at Carter-lane on this side, proceeding eastward along the new street, or up Old Change, and westward into Bridge-street, Blackfriars; and may some day be continued up into St. Paul's yard, the levels to be arranged in rising off the bridge to agree therewith, preserving a terrace round St. Paul's."

The suggestion which was long since made in our columns, that subways for sewers, gas, and water-pipes—to which may now be added for telegraphic wires—were the only effectual remedy for the continual nuisance of breaking up the pavements, is now forcing itself on the public notice through the columns of the daily press.

An experiment with it to a small extent, say a quarter of a mile, is advised by the *Times*, and this is assuredly the most prudent as well as most hopeful plan, and one to which, we are sanguine in our expectation, the City or other authorities will ere long give a fair trial, at least while laying out some new line of street.

There is another cause of destruction to the streets, and hence obstruction to the traffic, besides that for which gas and water pipes are

* This is more than doubtful.

† The translator thinks it has been generally used in the new fortified works at Verona.

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